STATE OF MISSOURI DEPARTMEN

T OF NATURAL RESOURCES

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July 17, 2014

OICR

40480155 **Superfund** 2.0

Mr. Jason Gunter Remedial Project Manager U.S Environmental Protection Agency Region 7 – Superfund Branch 11201 Renner Blvd. Lenexa, KS 66219

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RE: Removal Action Report for the Big River Mine Tailings Site 6 Superfund Site in St. François County, Missouri

Dear Mr. Gunter:

The Missouri Department of Natural Resources' (Department) Hazardous Waste Program (HWP), Superfund Section has reviewed the "Removal Action Report for the Big River Mine Tailings Site 6 Superfund Site in St. Francois County, Missouri" dated February 2014. The following comments are provided for your consideration.

- 1. Regarding typographical errors, please use the spell check for the entire document because multiple errors were identified.
- 2. We have received the Removal Action Report (RAR) for the Big River Mine Tailings Site 6. This Removal Action Report documents the completed construction activities that took place during Phase B of the removal action, which includes Site 5, Site 6, and Site 7. It is unclear to us if we will be receiving a Removal Action Report for all of the other sites within the Big River Mine Tailings site (Desloge) which would include Sites 1 through 4. To our knowledge, the Department has not received for review and comment a Removal Action Report for Sites 1 through 4 of the Big River Mine Tailings Site.
- 3. In the Administrative Order on Consent (AOC) for the Removal Action for the Big River Mine Tailings Superfund Site, EPA Docket No.VII-94-F-0015, page 14 under the heading Design Analysis and Removal Action Work Plan, it is indicated/stated that within 30 days after completion of all removal activities required by the approved Design Analysis and Removal Action Work Plan, Respondent shall submit to EPA for review and approval a Removal Action Final Report summarizing the removal actions taken by Respondents and documenting compliance with the requirements of this Consent Order, the Removal Action Statement of Work, and the Design Analysis and Removal Action Work Plan. The Department did not receive the Removal Action Final Report within the 30 day schedule set forth in the AOC.



- 4. In the Administrative Order on Consent (AOC) for the Removal Action for the Big River Mine Tailings Superfund Site, EPA Docket No.VII-94-F-0015, page 14 under the heading Design Analysis and Removal Action Work Plan, it is stated: "At the same time that Respondents submit the Removal Action Final Report, Respondents shall submit for EPA review and approval a Post-Removal Site Control Plan. This plan shall describe the activities that Respondents will perform in order to maintain the long-term effectiveness and protectiveness of the removal action following EPA approval, Respondents shall implement the Post-Removal Site Control Plan". The Department did not receive the Post-Removal Site Control Plan within the 30 day schedule set forth in the AOC.
- 5. In the Administrative Order On Consent (AOC) for the Removal Action for the Big River Mine Tailings Superfund Site, Docket No. VII-94-F-0015, page 57 under the heading Appendix A, Statement of Work, Schedule, it is stated/indicated the Respondent is required to submit Operation and Maintenance Plans (O&M) every five years, starting five years after the Environmental Protection Agency (EPA) approval of the Final Removal Action Report. It is to our understanding these O&M Reports should be submitted to the EPA and the Department in or about July-September 2019, depending on what date the EPA approves this Removal Action Final Report.
- 6. Throughout the Removal Action Report, there is not anything mentioned in regard to continuing storm water monitoring at this site. There needs to be something mentioned within the report about storm water sampling because this is an applicable or relevant and appropriate requirement (ARAR) for the Big River Mine Tailings Site. Page 5 of the Design Analysis and Removal Action Work Plan, includes Storm Water Requirements (10 CSR 20-6.200). The work plan states that the substantive requirements of the State of Missouri storm water program will be complied with at the Big River site as long as runoff from the site comes into contact with the tailings. Storm water sampling is a requirement for this site and the Department believes that there needs to be something mentioned in the Removal Action Report about complying with ARARs for storm water requirements as ARARs. Please include this information in the report.
- 7. Page 9, Section 5.1 Materials QA/QC states: "Most materials excavated from areas above final grade were hauled away from Site 6. This material was placed in either the designated tailings fill or disposal areas in Site 7 or along the perimeter haul road in the Upper Terrace". This sentence makes it unclear if most or all of the material was hauled away from Site 6 to the tailings fill, disposal area in Site 7, or haul road. This sentence needs to state whether all of this material was disposed of at these three designated areas and if it was not, please state what other locations were used to dispose of this excavated material. This sentence needs to be clarified within this section of the report stating if alternate locations besides the tailings fill, the disposal area in site 7, or the haul road were used for disposal of excavated materials.
- 8. Page 9, Section 5.1 Materials QA/QC states: "Materials were separated by visual examination". This sentence is very vague. It is unclear what "visual examination" is

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referring to. Please explain in further detail what visual examination is referring to and include this in the report.

- 9. Page 12, Section 5.3, Paragraph 2, Design Modification states: "The reconstruction of this area was completed to provide a stable surface for the placement of rock, as well as to allow for the drainage of the slimes area to prevent future slope instability". It is our understanding that when the area of slimes and slope instability became a problem for the site, more than one method of monitoring was used to measure how much these slopes were moving and/or eroding into the Big River due to movement of groundwater beneath the site. When looking through the report, there is not a clear indication of whether slope stability is still continuing to be problematic for the site, if slope stability monitoring is ongoing, and what the results of slope stability monitoring to date have been.
 - Page 24, Section 9.1, Compliance with Design Plans, Bullet point 5 states: "Water Erosion of lead-contaminated tailings from Site 6 has been controlled". This sentence indicates that erosion off site of tailings has been controlled but it does not give a clear indication if "water erosion" is referring to movement of groundwater beneath the site, water erosion from the river, or erosion from storm water runoff. These details need to be clarified in the report stating if slope instability is still an ongoing issue for this site and a better explanation needs to be included in regard to what "water erosion" on Page 24 is referring to.
- 10. The last quarterly progress report that we received dated January 10, 2014, stated that the vegetation maintenance activities on site are ongoing and this included the use of biosolids on portions of the site that were vegetated during the completion of the removal activities. It is unclear to us if the use of biosolids is still being utilized on site to enhance vegetation per the last progress report. This detail needs to be included in the Removal Action Report clarifying if biosolid application is still being used onsite.

Thank you for the opportunity to review and comment on the aforementioned document. If you have any further questions regarding this letter, please do not hesitate to contact me at the Missouri Department of Natural Resources, Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65101-0176, by telephone at (573) 526-4208, or by email at brandon.wiles@dnr.mo.gov

Sincerely,

HAZARDOUS WASTE PROGRAM

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Brandon Wiles Project Manager Superfund Section

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